

# Natural Resource Management, Property Rights and Resilience in Afar, Ethiopia

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## Project Outline

The Afar region is one of the poorest and underdeveloped regions of Ethiopia. The chiefly pastoralist and agro-pastoralist livelihoods of the Afar population have fallen under increasing pressure due to changing natural and socioeconomic conditions. Natural resources such as land and water previously used and shared as common property resources, have become limited and access increasingly restricted. This, alongside climate change processes and population growth, challenge proven livelihood strategies. The drought resilient semi-nomadic pastoralism of the Afar is no longer as effective due to transformations of rangelands, conflicts, and alien plant invasion. The already degraded vegetation cover is worsening, as a result of changing precipitation patterns, erosion, and overgrazing. The capacity of (agro)-pastoralists to react and sustainably manage natural resources as well as to sustain their livelihoods is questioned.

## Aim and Objectives

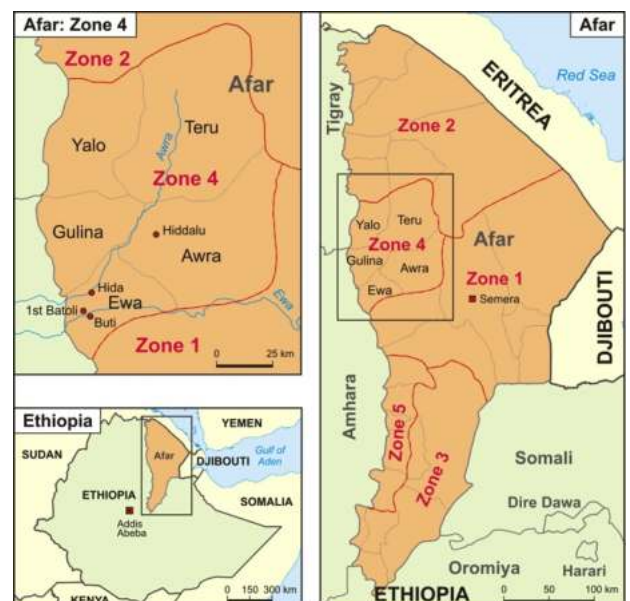
The report aims to examine the current state of Natural Resource Management (NRM) found within Ewa and Awra Woredas of Zone Four of Afar. Its main objectives are:

- to identify natural resource management and utilization practices,
- to assess access to natural resources and identify institutions of resource management,
- to document indigenous NRM knowledge and skills, and their current relevance,
- to document natural resource based conflicts,
- to assess risks and challenges brought on by climate change,
- to investigate migration practices, routes, and destinations,
- to identify communication methods between residents and government officials,
- to record community representation in and awareness of regional policies and programs, and
- to document resilience methods and highlight the support needed to strengthen resilience in Afar.

## Research Sites and Methodology

The study focuses on the *woredas* Awra and Ewa in Zone Four of the Afar Region. Two pastoralist *kebeles* Hiddalu (Awra) and Buti (Ewa) and two mainly agro-pastoralist *kebeles* Hida (Awra) and 1<sup>st</sup> Badoli (Ewa) were chosen. Two perennial rivers that originate in the Tigray and Amhara highlands, as well as several seasonal rivers service the semi-arid area. It is heavily affected by flash floods and various erosion processes.

Field research in the study area included semi-structured qualitative interviews with local stakeholders, members of regional and local government institutions, village elders and clan leaders, local researchers, and NGOs. The analyses are supported by a literature review and analysis of relevant studies, policies, legislation, and reports pertaining to NRM in Afar. Fieldwork was undertaken during October and November 2013 and in March 2014. Altogether, 35 in-depth interviews and 26 group interviews were conducted.



## Results

The Afar perceive various interacting variables as key threats to their livelihoods. A fundamental concern is the increasing rate of recurrent droughts and the stark **change in rainy seasons**, from three reliable yearly seasons to a state of sporadic occurrence or complete disappearance. The change has degraded soils, depleted vegetation, and limited water access, thus impairing Afar resilience strategies. Seasonal rivers and gullies once capable of pooling water for between one to three months and conducive for traditional well creation, have dramatically reduced capacities due to the higher frequency of flash floods and soil inability to absorb and retain water. The *buji*, a traditional shallow well dug along flowing and dry riverbeds so that water can pool, can no longer be utilized along seasonal rivers as before. An inability to use traditional methods has resulted in a greater reliance on perennial rivers and human-made water schemes such as hand pumps or irrigation canals, systems managed by public or civil society groups that restrict access. Those who reside far from water sources are severely disadvantaged; people based along once useful seasonal rivers are forced to travel up to 11 hours every two to three days to collect water.

The modified rainy seasons paired with heavy overgrazing have led to severe **erosion** processes. Throughout Zone Four, various types and levels of erosion are present: stream-bank, rill, gully, roadside, and wind erosion. Short but strong rainfalls on dry grounds wash away top soil as well as deepen gullies originally formed through rill erosion. Gully presence is amplified throughout *kebeles*, leaving residents feeling unable to combat or contain the prolific expansion. Stream-bank erosion reduces and washes away agro-pastoralist farms during rainy seasons as the strength of flash floods deepens and widens riverbeds. Not only is farming land lost, regular realignment of irrigation canals leading to *kebele* weirs must be conducted to connect canals with the altered river's stream.



**Local land management measures** taken are minimal and inadequate to match the expanding erosion processes. The deficit in local accountability for communal land management exacerbates the problem. Concentrated action typically only occurs when permanent communal buildings such as schools or health stations, and farmland are threatened with *kebele* residents endeavouring to prevent damage.

The decrease in available **fodder** is accredited to the change in rains, erosion, and overgrazing, with an increased demand for the limited fodder capable of regenerating. Traditional forms of forest protection such as *Coox Dacayri*, prohibiting the removal or alteration of trees without clan permission, no longer factor into residents' thinking because of a heightened need for fodder; branches are removed without permission for livestock fodder.

A surge in the presence of local and regional government further weakens traditional practices, diminishing clan rule, influencing **property rights**, and access to natural resources. Resources previously seen as communal, such as land, can now be privatised thus restricting access and utilisation rights; a change further



cemented through new agricultural practices such as irrigated arable farming. Residents in 12 out of the 20 *kebeles* across Ewa and Awra have begun to farm, attempting to generate additional agricultural output and to diversify their livelihoods in view of rangelands depreciation and increasing frequency of droughts. But irrigated arable farming is also threatened by environmental changes.

**Migration** is one cornerstone of the pastoralist system, but practices, routes, and destinations have changed. Movement has transitioned from being done to allow for rangeland regeneration and to provide varied fodder critical to livestock health and value, to a forced practice as a consequence of insufficient fodder availability. Afar can no longer traverse great distances due to weak animals and insufficient resources along their routes; a typical example being the removal of the 12-day trip from Ewa to Dobi, done

so that camels could feed off salty plants found there. Rangeland fodder is unable to sustain herds as previously and privatisation prevents access, as seen in sugarcane plantations and small-scale farms.

As a consequence of rangeland depletion pastoralists increasingly move into highland areas, providing ample opportunities for **conflicts** to arise between highlanders and Afar. In 2001 a noticeable rise in resource and theft based conflicts occurred in and near highland areas, however the increased presence of government and clan officials has curbed the severity and number of conflicts over the past ten years. The relatively new presence of repeat conflict between Afar and Amhara came at a time when Afar-Afar conflicts began to decline. Conflict reduction within Zone Four has been accredited to the government interventions, such as the enforced removal of *desso*, from 2004. *Desso* is traditional rangeland protection and rejuvenation through access restrictions. *Desso* consists of the *waamo* (primary residents of a region) having the power to grant or deny other clans access to their rangelands, in order to preserve and save fodder for their own livestock during times of drought. This restriction of access led to conflicts between clans, often resulting in injuries.

The transition from clan to government rule and control has enhanced government leader importance and responsibility. The **clan leader's role** in the *kebele* has diminished authority through the introduction of the comparatively new position of the *kebele* leader. The shift is clearly witnessed in the problem and concern reporting practices employed by the Afar. Primarily done through *kebele* leaders with the clan leader acting in support, information is passed from *kebele* leader to the *woreda* level and, if necessary, to the regional government. Forming a bottleneck, responses and solutions are transmitted in the same fashion consequently severely impinging the potential for residents to speak directly with the *woreda* and above, or for *kebele* leaders to speak with the regional government. Residents reflected that the limitation in communication paths leave representatives ill-equipped to speak and act on their behalf.



**Community awareness of policies and programs** both implemented in and relevant for Afar residents fluctuate. Familiarity with NRM policies and programs is weak, especially in more remote areas; policies relating to land ownership and resource use are vaguely understood by agro-pastoralists and not at all by most pastoralists. A clear example of both the *kebele* leader's level of control as well as involvement in policy enforcement is their role in settlement projects; they determine the selection of participants as witnessed in Horongo (Ewa) and Hida (Awra).

### Conclusion and Way Forward

- The Afar conduct various measures, evolving from traditional practices through the incorporation of outside influences, to strengthen their resilience, but are confronted with new significant threats.
- The decrease in access to and presence of natural resources, at times resulting in conflict, and the reduced execution of indigenous NRM practices have negatively impacted and weakened livelihoods.
- The communication methods between residents and government are inflexible, and understanding and awareness of policies and programs are limited.
- Customary land ownership has been replaced by formal property rights, thus restricting access.
- Despite the small-scale adoption of climate sensitive stabilisation methods, such as enforced rangeland seclusion, a commonly held perception that land management ought not be done by pastoralists remains.
- Training in land management, as well as capacity building to sensitise an increase in a community responsibly levels, would assist in increasing the resilience of the Afar.
- Outside support working towards combating serious erosion concerns would provide needed technical support.
- Steps taken to minimise natural resource based conflicts have reduced clashes, however additional attention paid to known conflict zones both inside and outside of Afar is required.